Typha spp. - Scirpus spp. - Mixed Herbs Great Plains Herbaceous Vegetation

COMMON NAME	Cattail species - Bulrush species - Mixed Herbs Great Plains Herbaceous Vegetation
SYNONYM	Great Plains Cattail - Bulrush Marsh
PHYSIOGNOMIC CLASS	Herbaceous Vegetation (V)
PHYSIOGNOMIC SUBCLASS	Perennial graminoid vegetation (V.A)
PHYSIOGNOMIC GROUP	Temperate or subpolar grassland (V.A.5)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural (V.A.5.N)
FORMATION	Semipermanently flooded temperate or subpolar grassland (V.A.5.N.l)
ALLIANCE	TYPHA (ANGUSTIFOLIA, LATIFOLIA) - (SCIRPUS SPP.) SEMIPERMANENTLY FLOODED HERBACEOUS ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM Palustrine

RANGE

Badlands National Park

Cattail-bulrush wetlands occur throughout the park, occupying depressions, drainages, seeps, springs, and ponds where saturated soils or shallow standing water is present on a more-or-less permanent basis.

Globally

This community ranges broadly over the northern Great Plains of the United States.

ENVIRONMENTAL DESCRIPTION

Badlands National Park

Cattail-bulrush wetlands occupy flats, slow-flowing drainages, sidehill and toeslope seeps and springs, and the edges of ponds and small reservoirs.

Globally

Stands occur in basin-like depressions, backwater areas of floodplains and shallow margins of lakes or ponds. Hydrology varies from seasonally flooded to semipermanently flooded.

MOST ABUNDANT SPECIES

Badlands National Park

Stratum	Species
Herbaceous	*Hordeum vulgare*, *Juncus* spp., *Scirpus americanus*, *Scirpus validus*, *Typha angustifolia*, *Typha latifolia*

Globally

Stratum	Species
Graminoid	*Scirpus acutus, Scirpus tabernaemontani, Typha angustifolia, Typha latifolia*

CHARACTERISTIC SPECIES

Badlands National Park

Typha angustifolia, *Scirpus americanus*

Globally

Scirpus acutus, Scirpus tabernaemontani, Typha angustifolia

OTHER NOTABLE SPECIES

Globally

Stratum	Species
Graminoid	*Eleocharis palustris, Leersia oryzoides*

VEGETATION DESCRIPTION

Badlands National Park

Naturally occurring, emergent wetlands growing along slow-moving creeks are dominated by prairie cordgrass (*Spartina pectinata*), spikerush, three-square bulrush (*Scirpus americanus* or *Scirpus pungens*), and softstem bulrush (*Scirpus validus*). Vegetative cover for emergent wetlands established along streams is dense, between 75-100% in most cases. Emergent wetlands that have formed around and in constructed ponds and reservoirs are dominated by species of cat-tail (*Typha angustifolia* and *Typha latifolia*) and bulrush (*Scirpus validus* and *Scirpus americanus*). These sites may also support some wetland shrubs such as sandbar willow (*Salix exigua*). Typically, vegetative cover in emergent wetlands of disturbed sites ranges from approximately 50-90%.

Globally

Vegetation varies from zones dominated by tall emergents 1-2 m tall to those with floating-leaved or submerged aquatics in the deeper margins and perennial forbs <1 m tall in the shallower margins. In the tall emergent zone, *Scirpus ssp. (tabernaemontani, fluviatilis, acutus)* and *Typha spp. (angustifolia, latifolia)* may dominate, mixed with a variety of other herbaceous species, such

as *Leersia oryzoides, Eleocharis palustris, Juncus spp*. and *Sparganium spp*. Floating-leaved and submerged aquatics are sometimes present, including *Azolla caroliniana, Lemna spp., Spirodela polyrrhiza*, and *Potamogeton spp*. (Steinauer and Rolfsmeier 1997).

CONSERVATION RANK G4G5. Although occurring in very small patches in the Great Plains, this relatively simple floristic association may be very widespread.

DATABASE CODE CEGL002228

MAP UNITS Cattail - bulrush wetlands are mapped under map class 14 (Emergent Wetlands) on the Badlands NP vegetation map. Linear wetlands are prepared as a line coverage. Almost all emergent wetlands are below the minimum mapping unit of 0.5 hectares, but are readily observable on the aerial photographs. Other wetlands mapped as separate units include those dominated by switchgrass (*Panicum virgatum*), map class 12 and sandbar willow (*Salix exigua*), map class 38.

SIMILAR ASSOCIATIONS
Scirpus tabernaemontani - Typha spp. - (Sparganium spp., Juncus spp.) Herbaceous Vegetation
Scirpus tabernaemontani Temperate Herbaceous Vegetation
Typha latifolia Western Herbaceous Vegetation
Typha spp. Great Plains Herbaceous Vegetation

COMMENTS
Badlands National Park
Many wetland sites were encountered and sampled during the course of fieldwork at Badlands NP. It is possible that a number of separate wetland associations could have been recognized, e.g. relatively pure stands of *Typha* spp. or *Scirpus pungens*, but stands were in general so small (<<0.5 ha) that such an approach did not seem practical.

Cattail - bulrush wetlands represent a regulated resource and are a valuable wildlife habitat. The presence of wetlands and ponded water controls the movement of livestock and many wildlife species, particularly bison, the largest grazing mammal on the park.

REFERENCES
Steinauer, G. and S. Rolfsmeier. 1997. Terrestrial natural communities of Nebraska. Draft - October 28, 1997. Nebraska Game and Parks Commission, Lincoln, NE. 117 p.